The AGRICULTURAL EDUCATION Magazine

The Agricultural Education Magazine

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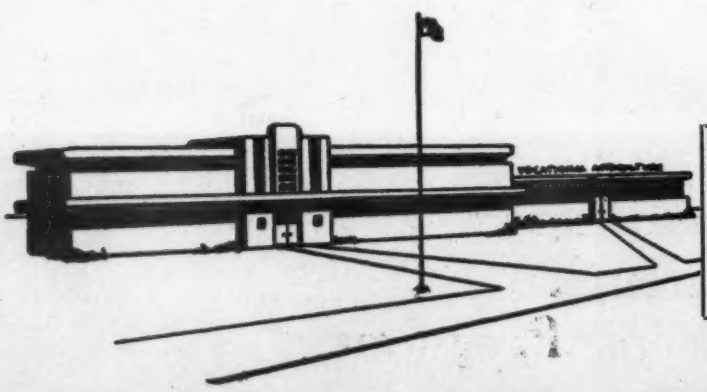

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Analyze Farms to Improve Boys

DUANE M. NIELSEN, Teacher Education,
Iowa State College

We are standing on the threshold of perhaps the most dynamic decade in the history of vocational education in agriculture. The contribution that the program will be making to American agriculture by 1970 will be dependent upon the ability of those of us currently in the field to combine our heritage of basic objectives and principles with the creative techniques and adjustments needed in order that we may maintain an optimum program. Our today's challenge lies in critically analyzing our program so that we may better meet the needs of those who are and should be enrolled. The theme of this issue of our national magazine is "Establishment in Farming Through Farming Programs." The supervised farming program certainly is a phase of vocational agriculture which merits analysis.

The supervised farming program has long been and still remains the backbone of *truly vocational* education in agriculture. R. W. Stimson, recognized as the father of supervised farming, stated in 1912, "It is believed that the project method of bringing agricultural science immediately to bear on actual farm practices is a promising solution of our most pressing problem in the field of vocational training." Louis M. Sasman, State Supervisor of Agricultural Education in Wisconsin, wrote 46 years later in 1958, "I think it is quite apparent to most people that the only way to learn how to do anything is to do it. Consequently, if a person is going to learn how to farm he must practice farming."

One of the unique features of vocational education in agriculture is the opportunity for students to learn how by doing. Certainly the leaders in the field support the contention that we work harder, learn faster and remember longer when we feel a need for that which we are studying, and when we are permitted to plan, to observe, to participate, to apply and to evaluate. Consequently, the farming program is an integral part of vocational agriculture, enhancing the environment for learning how and providing the opportunity to do. Well planned farming programs, embracing the total farm, are a fertile source of problems which may be the base for the instructional program. From developing and expanding farming programs come construction and repair needs, a prerequisite to a strong farm mechanics program in a department of vocational agriculture.

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From the Editor's Desk . . .

Changes needed in farming programs - - -

The articles on farming programs published in this issue of *The Agricultural Education Magazine* reflect a growing concern regarding changes needed in farming program concepts to keep abreast of changes in farming. Suggestions are made which would help us take the greatest possible advantage of our unexcelled teaching-learning situation—students who, for the most part, live and work on farms. Here are some possible changes in farming programs to think about.

Farming programs should reflect a greater concern for "on-farm" activities in farm mechanics. The school farm shop should be used to provide boys with new learning experiences; boys should apply these learnings on the home farm as a part of their farming programs.

Farming programs should involve, to a greater degree, experiences of a farm management nature in relation to the total farm business. Parents cannot be expected to let sons make major decisions, but they can be expected to involve their sons in the deliberations necessary for making the decisions.

Farming programs should be adjusted more rapidly to increasing specialization in farming. There is a tendency to insist on a great diversification of ownership projects. Increasing specialization may make it necessary to think more in terms of partnerships with parents in enterprises rather than complete ownership. Some of the new forms of farm financing may be used for financing farming programs.

Farming program record books should be re-studied to place more emphasis on getting accurate and meaningful records kept and to eliminate items which, at best, result in inaccurate estimates. Students cannot be taught to value records which they know are not accurate.

Farming programs should reflect the increasing concern for production testing of all kinds of livestock. Farming programs, in general, should provide opportunity for leading the way in the adoption of new farming practices.

Farming programs should provide a strong base for a comprehensive instructional program in all phases of farming. A broadening of programs through the use of the improvement and supplementary practice phases has been long overdue.

Farming programs should increase in size, following the trend of increasing size of farms. Some teachers report that farming programs are larger on the average and that parents are ahead of the teach-

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Changes Needed - - -

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ing profession in making this adjustment.

Sober evaluation will reveal many ways in which farming programs can and must change. To keep the vocational agriculture program strong will require farming programs which reflect the constantly changing farming situations. □

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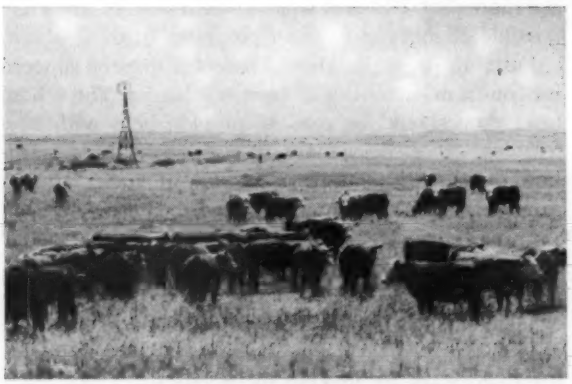
We have moved through the era, if it ever existed, when a "project" at home provided optimum experience for the boy. The young man attempting to become established in farming today needs abilities and experiences well beyond those accrued in raising a sow and litter, a few sheep or a dairy heifer. Let's expand our horizon, as many are doing, to encompass those situations, problems and decisions which typically face today's farmer. Self ownership of production projects and the accompanying pride and responsibility is important, but experience in part or total management of entire enterprises, in coping with the intricacies of planning, operating and analyzing the total farm business is now virtually a prerequisite to successful establishment. A farming program which combines a broadened base of essential experiences with careful long-range planning should provide a young man with both greater know-how and capital as he moves into full-time establishment. Whether on the home farm, the school farm or in a placement for experience situation, let's encourage a program of experiences in farming which is commensurate with the problems these young men will face as they move into today's agriculture. Then, let's work shoulder to shoulder with them through effective young and adult farmer programs so that necessary adjustments may be met with confidence and a successful progressive establishment may be realized. □



A partnership that grew into full time ranching. (U. of Nebraska photo)

An enterprise that grew out of a realization that ten steers require about the same labor as one. (U. of Nebraska photo)

Modern farming demands - - -

Modernized Farming Programs

H. W. DEEMS, Teacher Education, University of Nebraska

H. W. Deems

"EVERY time I see a runty pig in a muddy, ten by ten pen, I shudder. I'm afraid it will turn out to be some vo-ag student's project." That statement was made about a third of a century ago by a national leader in vocational education.

I had somewhat the same feeling a short time ago. I rode half-way across the state with a leading agriculturalist. We discussed such topics as pig hatcheries, year around farrowing, feeding 1,000 steers in two hours, and other features of efficient modern agriculture. That night at an FFA banquet, a number of farming program pictures were shown. One was a boy with a sow and litter penned in an A-type hoghouse located about a quarter of a mile from the house. In another picture a big, husky lad stood proudly beside a steer he was fattening out. Other pictures included a dairy calf, five ewes, ten acres of corn and four acres of alfalfa.

Later that evening as my friend and I discussed the meeting, I detected a note of sarcasm in some of his remarks. He felt vo-ag must be quite interesting and that it was nice the boys selected hobbies closely related to agriculture. I turned off the lights and went to bed when he started referring to the projects as "doll houses."

Recently I attended a district FFA meeting. About 20 fine, young farm lads were introduced as State Farmer applicants. Briefly they told about their farming programs. The typical first sentence was, "I completed five production projects last year consisting of 5 fattening steers, 3 sows and litters, a purebred beef heifer, ten acres of corn and 15 acres of wheat." There were, of course, some exceptions. One lad farmed 80 acres of land and had 20 sows that farrowed 35 litters.

One more experience before stating the theme of this message. Early this spring, a group of about thirty leading agriculturalists of the state were meeting as an advisory group to an agricultural institution. About a day was spent in discussing agricultural programs for youth. Members of the committee were rather critical of farming programs conducted by some vo-ag students. One agribusiness man summed up an hour's discussion by saying, "The boys drive to school in a '59 Buick, meet in a classroom that's an 'A-model,' to study how to conduct a horse and buggy farming program." In other words, certain members of this group felt that vo-ag was not

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keeping up with the rapid change in farming.

I have always considered the farming program the backbone of our vocational work. It hurts me "way-down-deep" to be critical of something that I have watched and helped develop. But right now I am convinced that we should all take a good look at all of our farming programs, not just the top two percent. We do not have enough good ones. We have been prone to bask in the glory of our American Farmers.

When I started teaching in 1925 the problems facing "ag" students were such matters as vaccination, castration, culling, feeding a balanced ration, selecting the right variety and other similar topics. Such problems could be discovered, studied and applied with a small project. Today the problems that need study are entirely different and cannot be found in "doll-house" programs.

With a declining number of farmers and an increasing total population, agricultural education must remain strong. The farming program must aid in strengthening the areas that at the present time are weak. Dr. Lowell S. Hardin, Agricultural Economist, Purdue University, says, "The number one requirement for success in farming tomorrow may well be management skill." Dr. Herrill DeGraff, Cornell University, points out that only a small percent of present day farmers are really efficient. Then he adds that the future holds little promise for the inefficient producer. Dr. George Deyoe and others emphasize that the successful farmer of tomorrow must be wise in the use and management of money.

Dr. Earl Butz, Dean of Agriculture, Purdue University, says, "Agriculture is changing from a way of living to a way of making a living. It is changing from a business of arts and crafts to a business undergirded with large amounts of science and technology."

Many successful teachers of vocational agriculture use the problem approach in the classroom. In this procedure, the first step is to discover the problem. The problems encountered by a boy with one sow in an A-type hoghouse are not the type of problems faced by modern hog producers.

A further review of the problem approach to teaching emphasizes the absurd practice of trying to teach from farming programs that are not typical of present farming methods. After spotting the problems and fencing in the situation, the student starts to assemble facts. He establishes possible solutions. He evaluates with care all factors. He interprets the information as it pertains to his situation and arrives at a decision.

Today the success of the modern farmer or rancher is based to a large degree upon his ability to make sound management decisions. For this reason the most important educational phase of the farming program may be the number and kinds of decisions the student has the opportunity to make.

If the work is to be of the greatest educational value, the farming program must be similar to the actual conditions found on the better farms or ranches of the community. The student must have an opportunity to deal with the problems he will meet as a farmer or rancher. Sound management principles should guide the student in determining the size and number of enterprises to develop. Proficiency in agriculture is the frequently stated objective of a program in vocational agriculture. The farming program is the place where the student gets as near as he can to occupational conditions and environment. The degree to which the farming program gives the farm lad an opportunity to deal with problems he will meet as a farmer is the measure of educational value.

It is not my purpose to present a complete solution to this problem of improving the farming program; in fact I do not have one. However, a brief look at a few of the practices and procedures now used might suggest areas for study.

We will probably have for some time young farm lads, 14 and 15 years of age, entering the vocational agriculture program. This, perhaps, is not bad. It is, however, in my opinion, wrong to insist that these boys have a complete farming program outlined and some of it in operation within 30 to 60 days after school starts. In so doing, we by-pass some of our best teaching opportunities in management. I feel that considerable time and study in the Vo-Ag I class should be devoted to problems related to the selection of the best possible program. Problems such as the following provide experience and training in making decisions:

1. Should I specialize in one production enterprise?
2. Do I want to try several small production projects during the first year?
3. Should I go into partnership with my father?
4. Could I gain more experience and make more money by working on a good farm or ranch during the summer?
5. Do I want a program that will make a quick cash profit so that I can continue my education in college?
6. Do I want a program that will increase in inventory value all year?
7. How much is my time before and after school worth per hour?
8. Can the production program be built to a size that will provide sound training in modern farming?
9. Are there certain farm skills that I cannot learn at home from Dad?
10. How much will certain improvement projects cost?

It may be an administrative necessity to report farming program selection once each year. However, it appears to me that this practice tends to emphasize selection for a short period of time and de-emphasize it for the balance of the year.

A few summers ago it was quite dry in June and July. As a result of this cattle were selling at a rather low price. I suggested to a vo-ag teacher that this might be a good opportunity for some of his students to buy feeders or foundation stock. His reply was that they generally bought in October and that it was hard to get any interest in buying during the summer. A father recently emphasized the other side of this question when he stated, "Cattle are too high but the boy had to have some for a project, so we bought them." The point I am trying to make is that good farm management stresses careful buying. I am not sure that our vo-ag procedures always utilize this buying principle.

It is comparatively easy and simple to report farming programs by using numbers and perhaps there is nothing wrong with the practice. The mistake is made when some person takes these figures and plays them up into a big news story. It is quite a common thing to read about some lad that completed 23 production projects with a labor income of $7,180, 11 improvement projects and 35 supplementary practices. Such a lad may or may not

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have been successful at farming; the real value of a program is not measured by numbers. I know a farm lad that completed just one improvement project in four years. As a result of that one project, he has today one of the finest and most modern farm shops in Nebraska; one that has attracted hundreds of visitors and has served many times as a model for other shops.

When discussing such matters as size, labor income and net worth, I am often reminded of a statement credited to H. G. Wells. It goes something like this: "Wealth, notoriety, place and power are no measures of success whatsoever. The true measure is the ratio between capabilities and accomplishments."

The last item that I want to suggest for study and consideration is that of project ownership. Traditionally, rural America has always felt that it was most desirable for a person to own something. Thousands of farm lads have had their interest in animals stimulated because they were given a dog, a pig or a calf. The relationship between interest so generated and modern agricultural education may be fleeting and obscure and so fail to last over the long pull.

Modern farming demands the cooperative effort of many people. Differences of opinion may well arise when two divisions of the same enterprise are maintained on one farm and thus lead to inefficiency. Conversely, a partnership carefully established may develop unity in the family and assist in modernizing farming activities.

The problem facing leaders in the field of vocational agriculture is one of intelligent analysis of present day farming.

The future belongs to those who prepare for it. □

Specialization vs. Diversification

in Supervised Farming Programs

DELMAR WITTLER, Vo-Ag Instructor, Lyons, Nebraska

Delmar Wittler

WORKING with farming programs in vocational agriculture can be likened to working with subjects and predicates in English, multiplication and addition in mathematics, or the 13 original colonies in the American history class. Farming programs were a prime part of vocational agriculture in the very beginning of the program. At that time and ever since instructors, supervisors, and administrators have realized the importance of farming programs to a sound curriculum of vocational agriculture in the high schools. My objective in this article is not to laud or question the merits of the supervised farming program, but to discuss possible changes or trends which may help the supervised farming program adjust with a changing agriculture.

Merits of Farming Programs

The farming experience requirement exerts a strong influence on every phase of the Vo-Ag program. As a brief review and to more or less set the stage for discussion, I want to outline a few merits of the supervised farming program that we may use as a sort of yardstick to measure the effects of any changes that we may want to discuss. The following examples were briefed from the editor's column in the October 1957 issue of *The Agricultural Education Magazine:*

The Vo-Ag supervised farming program provides opportunity for application of classroom learning; it provides the basis for building much of the instructional program; it provides the basis for many of the activities of the FFA; it provides a means for developing a sense of responsibility in high school boys; it helps boys mature or grow-up in a society that tends to slow their maturation process; it provides a means for acquiring capital resources; it provides ownership; it provides for demonstrations of new developments and approved practices; it provides a means for teaching planning and the importance of good planning; it provides exploratory experiences in farming enterprises.

These qualities of the Vo-Ag supervised farming program exert a strong influence on vocational agriculture. Whenever changes are to be made, sound thinking and planning is needed to change toward the better. Any change in the Vo-Ag supervised farming program must then do something to improve the overall value of the previously mentioned merits of the program.

As was mentioned earlier, the farming program must be flexible enough to adjust to a changing agriculture. In this case reference is not to flexibility from the standpoint of governmental regulations, but to the possibility that we as instructors may have too much of a tendency to follow tradition and not enough vision of a future agriculture in which the boys we are now training will be expected to thrive and prosper.

Changes in Agriculture

Let us take a minute to see how agriculture is changing. In leafing through various farm magazines, it isn't hard to find articles such as the following: "Fifteen-hundred Hogs a Year," "10,000 Layers and He Quits at 5:00," "He Makes Raising Hogs a Full Time Job," "You Make More With Continuous Corn," "Contract Farming," "Hullabaloo About Vertical Integration" and many more. These articles along with the opinions of agricultural economists and farm managers all over the country point to great changes in agriculture.

The thinking along this line can fairly well be summed up by the following quotes of two of the nation's leading agriculturalists: D. Howard Doane, the dean of the American Farm Managers, has written, "the impact of this new financing arrangement upon agriculture is so great that it may completely revolutionize the production of animal products . . . The time is approaching when most farm products will be produced under contracts of one kind or another."

"Vertical integration controlled by the middlemen puts farming at the bottom of the pyramid," James Patton, president of the National Farmers Union, said recently. "If the food business is to be vertically integrated, the heart of the matter is whether it will be controlled for the benefit of farmers and ultimate consumers or for the benefit of a comparatively few corporations."

Farmers in the broiler industry have found that bucking integration is about as effective as trying to change the direction of a hurricane

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with a palm-leaf fan. Since farmers and farm leaders are not taking an impersonal, detached attitude toward these developments, can we in Vo-Ag afford to do so? Should vocational agriculture reflect these trends in the supervised farming phase of the program?

Up to this point, I must admit, I had made some pre-adjustments which were more or less based on the idea that in Vo-Ag, my main objective was to develop a background of educational experiences in various enterprises of the farm. We had used the Vo-Ag supervised farming program as an exploratory ground in helping a high school boy decide what enterprises he may want to expand in, if any, after he graduates from high school. At this point I began to talk to Vo-Ag instructors, college professors, successful farmers, people in Vo-Ag and people looking at Vo-Ag from the outside. Nearly everyone could agree and understand the basic goal as set up to result from a sound supervised farming program was that of eventual establishment in farming. The differences arose from the various opinions as to how we could best reach this goal. I am not going to try to summarize this varied opinion at this time. However, I would like to throw out for discussion some of the thinking I encountered during these interviews.

First of all there was the thinking of the Vo-Ag instructor who felt that it was his duty to cover a large field of farm enterprises. A later interview with another Vo-Ag instructor provided contradiction to this philosophy. He felt, "It's the adage of plowing a large field shallow, or plowing a small field well." "The total production, or education in this case, might well be more in the specialized project."

A college professor stated, in trying to summarize his opinion toward a diversified farming program, "I believe that you in the FFA, and we too in 4H, have a tendency to think too much in terms of diversification."

"We like to work toward the family farm with a few cows, an orchard, a large garden, a laying flock which will fill the old chicken house, a spattering of various field crops and the like, but thank goodness we are relatively ineffective," stated an ex-county agent. He went on to say, "Unless we wake up and get a little experience in this contract type of farming, we aren't going to be able to do any good except to help our family type farmers with diversified interests starve a little slower."

A dairyman brought out the fact that the risk involved now in a specialized enterprise is less than on a diversified farming operation in that it was easier in his case for him to promote a $3000 loan on his milking parlor and bulk tank than it would have been for him to borrow the same amount to finance a variety of other enterprises on his farm. He stated, "It's their business to calculate the risks, and they evidently like the eggs all in one basket. I could probably get more from the same place to increase the size of my herd and increase my output if I had the guts to get in deeper, and in another year I might."

How We Can Adjust

How can Vo-Ag make an adjustment to this trend? Looking a little further, it seems relatively simple in some enterprises, a bit more difficult in others. Let's take the old Vo-Ag supervised farming program standby —the sow and litter project for an example.

Three years ago, a midwest feed mill began putting gilts and boars out on a lease basis. Now they are pushing production at four breeding centers trying to keep up with the demand. Their operation consists of putting out to farmers lots of 11 gilts and one boar that cross well. They also furnish supplemental feeds from breeding to market with no interest charge for necessary financing. The farmer keeps the original breeding herd for two litters, returns one-tenth of the progeny and the old sow in a marketable condition. The remaining nine-tenths of the progeny are considered the property of the farmer and he may market them as he wishes.

When the program was started, the company assumed that their major customers for the sow lease program would come from the young farmers who needed capital to get a start. It has not worked out quite this way. As one owner of 500 acres of rich Iowa farmland said, "Why should I run the risk of death losses and non-breeders and have money tied up in a breeding herd if they will do it for me? Their feed is no more expensive than others and their management practices are completely sound—I'd be following them anyway."

Similar operations, deals, contracts or whatever you may want to label them, may be found easily for the familiar beef fattening enterprise of the supervised farming program.

In the poultry enterprise, the laying hen project offers wonderful opportunities in exploring part-time specialization for boys in vocational agriculture. As a freshman, the boy could begin the project with a relatively small number of hens and work up to 500 which is the minimum another feed mill will finance. After graduation from high school he could strive for the minimum number of 1000 considered to be an economic unit, then expand from there to the limits of his abilities or facilities.

Along the horticultural line, plenty of possibilities await the boy located near a market. And I might add that it was brought out that a town of 1000 might furnish a good market outlet for strawberries, red raspberries, cherries and even garden produce such as tomatoes, etc. As an example of a small part-time specialized tomato project in an area with a market, a 30'x50' patch yielded a labor income of $335.

In the dairy production field, specialization will probably have to take a different course. Due to the fact that in the near future all fluid milk to be used for human consumption and offered for sale will have to be produced under Grade A conditions, it would be difficult for a boy whose father was not producing Grade A milk to try to get a foot in the dairy production industry. On the contrary, if milking and storage facilities are available, what could be better than to have the boy add to the size of the herd and cut down the high per animal fixed costs as he developed his specialized dairy cattle enterprise.

Change Is Inevitable

In conclusion I would like to say, "Change is the law of progress." The biggest challenge we face in life is that of adjusting to changing times. I am reminded of the giant dinosaurs which inhabited this continent thousands of years ago. The dinosaurs, big though they were, could not adjust to changes and today are extinct. Though our Vo-Ag program is big and well-established, we cannot afford to ignore a changing agriculture. We, as instructors in Vo-Ag, should each make a sincere attempt to help adjust for the specialized type of agriculture which is sure to come to our communities in the near future. The change does not have to come all at once. In

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fact, the sooner we get started the more gradual the changes may be. Perhaps we may never have more than a fraction of our Vo-Ag boys involved in specialized projects, but what can be wrong with having one boy in the department in contract on ten sows, 500 laying hens, 20 head of beef fattening steers or a plot of strawberries or tomatoes. The contract itself would open new possibilities for study in the classroom. It would be a great experience for the boy involved and the entire department would no doubt profit greatly from the new educational avenues opened. With livestock prices riding close to the top of the price cycle, it might be nice to have some of the risks carried by contract to some outside interests.

Though the author in this article, has gone to considerable detail in enumerating possibilities of contract farming through feed companies, it should not be misconstrued that he is advocating the same. It is simply recognized that this is one possibility of increasing the size of the enterprise by the use of outside capital. Other methods of finance (and that is the big problem) would also be suitable. The author simply believes that we, as instructors, should get some experience along this line of specialization and at the present it seems that the feed companies are the ones with whom we are going to need the experience. We can all recall the way the broiler industry developed—whether this is good or bad will be up to each reader to decide for himself. We can use the broiler industry as experience. We can bet the feed companies are.

The change that faces agriculture is inevitable, and the challenge which faces us is to direct the change along constructive and beneficial channels. □

Arouse interest in record keeping through - - -

Continuous Record Analysis

LLOYD J. PHIPPS, Teacher Education, University of Illinois

Lloyd J. Phipps

HIGH school boys in vocational agriculture, and even adults, are often antagonistic regarding the keeping of adequate farm records. Why do boys and adults so often express a dislike for record keeping? What can teachers do to develop wholesome attitudes regarding record keeping? The following list probably includes many of the reasons for the dislike of record keeping:

a. Lack of understanding and knowledge regarding the mechanics of record keeping.
b. Lack of understanding of the value of many of the records that are required.
c. Lack of knowledge regarding reasonable standards for farming activities.
d. Lack of definite goals for farming activities.
e. Failure to use records to evaluate progress.

Let us analyze each of these reasons as to its relationship to the frequently found antagonistic attitude toward record keeping. *First, do the farmers and prospective farmers in vocational agriculture classes lack understanding and knowledge* regarding record keeping? Teacher educators, supervisors, and teachers have devised many ingenious and successful ways of teaching record keeping so that farmers and prospective farmers will understand the techniques involved and have adequate skill for successful record keeping. The accusation that farmers and prospective farmers lack the understanding and knowledge necessary for handling the mechanics of record keeping is true in a decreasing percentage of communities. However, it will probably be impossible to devise procedures to teach the mechanics of record keeping that are foolproof for all students.

Second, is there a lack of understanding of the value of many of the records that are required? The understanding of the value of records is also usually well taught, but it is easy for persons who are skilled at record keeping to underestimate the knowledge of others regarding the values inherent in keeping certain types of records.

Third, is there a lack of knowledge regarding reasonable standards for farming activities? Is there a lack of goals for farming activities? Some may reason that standards and goals are not related to record keeping. They are, however, related indirectly to record keeping because records are of little value without the establishment of definite goals. The knowledge of standards and the adoption of goals make the use of records for analysis purposes possible, and the analysis of records makes record keeping meaningful and worthwhile. The clarification of standards and goals often is neglected in teaching. The result may be a decreased interest in record keeping. It is foolish to expect farmers and prospective farmers to appreciate record keeping if the records kept are not used for analyzing the farm business.

The frequent analysis of records often creates functional teaching situations.

Fourth, are the records kept in vocational agriculture used to evaluate progress in farming? They are used, but are they used often enough? It is the writer's observation that records kept by boys, and even adult farmers, are not used efficiently, effectively, or often.

Records are often analyzed only at the completion of each calendar year. This is good, but it is not an adequate use of records. The span of attention of boys, and often of adults, is less than one year. No matter how much enthusiasm is generated for record keeping at the beginning of the year, it has usually disappeared before the end of the year if the records being kept have not been used frequently for analyzing the students' farming activities.

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Continuous Record - - -

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The solution to the problem is effective teaching regarding standards, the promotion of the adoption of definite goals, and frequent or continuous use of records to measure progress toward those standards and goals.

Frequent or continuous use of records to measure progress toward standards and goals is the key to success in obtaining good records. It is the key to success in obtaining an appreciation of the value of the mechanics of record keeping. It also provides the motivation needed by many individuals for learning the skills involved in record keeping.

How is it possible to use records frequently to evaluate progress? The task can be accomplished if the teacher and students have imagination.

The first step is becoming familiar with the intermediate results that may be used to analyze progress. Analyses of progress necessitate good records and make record keeping meaningful and important.

Following are a few ways in which records can be used prior to the end of the year or the completion of a production cycle:

1. Comparison with standards and goals of the percentage of young raised to certain ages in any livestock enterprise.
2. Comparison with standards and goals of the amounts of various kinds of feed required, as shown by students' records, to raise the young of all types of livestock to certain ages.
3. Comparison of the percentage of germination in crops with standards and goals.
4. Comparison with standards and goals, at frequent intervals, of the total amounts of products produced.

The frequent analysis of records maintains and increases interest in records.

5. Comparison with standards and goals of the amounts of products produced for certain periods of times such as a day, a week, or a month.
6. Comparison with standards and goals of the death losses for certain intervals of time.
7. Comparison with standards and goals of the rate of growth of plants or animals.
8. Comparison with standards and goals of the reproduction rate of all types of livestock.

The preceding comparisons should not be academic exercises. The records of the students should be used for the comparisons. Following are a few of the swine records that are kept, could be calculated easily, or should be kept for the analysis and evaluation of progress:

1. Percentage of pigs born alive.
2. Litter weight at birth.
3. Litter size at birth.
4. Percentage lost during first week.
5. Percentage raised to weaning age.
6. Percentage raised to market weight.
7. Litter weight at 56 days.
8. Total feed requirements at 56 days.
9. Loss of weight of gilt or sow from birth to weaning.
10. Gain in weight of gilt or sow during gestation.
11. Feed requirements of sow until rebred.
12. Feed requirements of boar each month.
13. Feed requirements per pound of gain until 56 days of age.
14. Total cost of a pig until 56 days of age.
15. Concentrate requirements per pound of gain until 56 days of age.
16. Feed requirements per pound of gain for certain intervals of time after 56 days of age.
17. Labor requirements per pig until 56 days of age.
18. Labor requirements per gilt or sow during gestation.
19. Labor requirements per pig after 56 days of age.

It may be unnecessary or even unwise to analyze and evaluate progress for all of the twenty factors given in the preceding list. The list was made extensive to show the possibilities for using records frequently during a cycle of production for an enterprise such as swine. Equal opportunities for frequent analyses and evaluations are also available in other farming enterprises.

The ideal is the use of records almost continuously to evaluate progress. A practical, attainable goal might be the use of records at least once a week throughout the year for the purpose of evaluating progress. If teachers promote the use of records at least weekly to measure progress, they will find increasing interest in records and record keeping during the year, instead of decreasing interest. □

Using Awards in the FFA

Can be of value in developing boys - - -

DON ERICKSON, Vo-Ag Instructor, Rugby, North Dakota

There seems to be rather general agreement among our educators that the amount of student learning varies directly with the intensity of student interest. In all of the pro and con discussion that rages around the contest program, it would seem that we tend to overlook a basic premise: all contests and awards programs are of value to the extent, and only to the extent, that they stimulate our boys to greater effort. With this premise in mind, it would seem that there is a place for a program of awards on a local level. We have such a program in Rugby and find that it has a great deal of value.

Inherent in all of us is the need for recognition, the desire to excel. No two boys are alike in their respective skills and abilities. A program designed to give to every boy a chance for his place in the sun must be a broad one, with a chance for every boy to succeed. Let us see just what is offered in most instances as incentives to FFA members.

First of all, we think of degree advancement. Limited first of all to a small percentage of the members, advanced degrees offer little incentive to the boy with limited opportunity for a good farming program. Addi-

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Using Awards - - -

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tionally, we do not confer State or American Farmer degrees on boys who are not good scholars, hard workers, and capable leaders. Here at Rugby we have produced 74 State Farmers since 1944, but even this record of attainment left no room for the majority of the members who passed through the department during those years. By the same token, although every boy here competes in the Chapter Public Speaking contest for the right to represent our chapter, only one each year has the real thrill of attainment as he receives the FFA Foundation Medal for this event. The same situation exists in the awards for Star Farmer, Star Dairy Farmer, Farm Mechanics, and Farm Electrification. All are very good, as far as they go, but they don't go quite far enough.

No boy is content to be just a spectator. No boy is totally without the ability to excel in some way. As advisers, our job should concern itself with giving that opportunity to receive recognition to all of our boys. We are, I believe, guilty of trying to make the best boys better and ignoring the boy who may need us even more.

We don't pretend to have all of the answers here. We have used for several years a point system for uniform awards. The system is included in our Program of Work and each boy owns a copy of it. We divide our awards into a Gold, Silver and Bronze Key for earning the greatest number of points in each of the ten divisions of the Program of Work. This means a total of 30 awards a year. The boy with a poor farming program may win the Gold Key for scholarship, whereas the poorer student may be the top winner in Community Service activities. Few boys graduate from four years of this kind of a program without hearing themselves referred to as a winner. It is good for their morale. It improves their interest in FFA, in vocational agriculture and in their school and community.

It is my sincere belief that most discipline problems stem from a lack of real interest in the program. We try to provide as much equality of opportunity to our boys as we possibly can. It has been my pleasure to observe poorly adjusted, "problem children" types of boys change to confident and competent people by the simple process of excelling in their chosen field of competition. The story is told of a small statured boxing coach who was noted for his vitrolic tongue. He was berating his heavyweight fighter for his ineptness and he chanced to say "Why, if I were as big as you are, I'd be the heavyweight champion of the world," to which his protege calmly replied, "Well, coach, what's keeping you from being the lightweight champion?" Not all of our boys can be American Farmers. Only a very few of them will reach the very top, but they can all do something and do it well. Our job is to find that something, help them exploit their abilities, and see that they get the recognition they deserve. Our boys, our chapters and our country will profit. □

Solutions to Problems of Individual Instruction During the Summer Period

JIM HAMILTON, Vo-Ag Instructor, Audubon, Iowa

Jim Hamilton

SOLVING the problems of individual instruction during the summer period starts with a recognition of the problems involved. With the closing of the formal school year late in the spring, the summer seemingly stretches out with endless time to coordinate the practical farming programs with the practices and principles suggested in the classroom. Such, unfortunately, is not always the case. Budgeting time for satisfactory summer on-farm instruction is one of the most critical problems from the standpoint of the teacher of agriculture.

The problems are numerous, but a few that warrant discussion include:

1. Establishing an order of importance.

2. Arranging class work, discussion, and group tours to show the students the desired end results wherever possible.

3. Using all teaching aids available, including the experiences of outstanding farmers and the technical knowledge of community agricultural workers.

4. Arranging travel schedules to minimize time and miles spent in travel.

5. Finding the best time of day to work with individual farmers and vocational agriculture students.

6. Avoiding the natural tendency to devote too much time to the already efficient farmers who ask for

(Continued on page 11)

Pruning trees.

Building terraces.

Solutions to - - -

(Continued from page 10)

professional advice.

7. Gaining the confidence of and helping the less efficient farmers and vocational agriculture students—those who are actually in the greatest need of aid.

The time element can be partially solved by utilizing the services of trained agricultural workers in the community and other farmers for certain kinds of instruction during the summer.

The problem of deciding which project is most important to pursue and arranging for demonstration of results has been solved in part for me because the major problem of my community is easily recognized by agricultural leaders to be soil management. Here, for example, is how this problem worked itself out a few years ago.

An adult class on soil management and soil conservation was planned to interest more Audubon County farmers in proper soil management and to help them put proven practices to work. The class work during the winter stressed the need for soil conservation, crop rotation, etc. Local farmers who were using the practices were called upon in panel discussions. Tours were conducted in the spring to give individual farmers first-hand observation on the results of the use of good practices. Farmers who had learned to lay out contour lines helped neighbors who wanted to try them for the first time. FFA boys who had learned contour work in class helped their fathers and neighbors. The Soil Conservation technicians helped still other farmers who requested aid. Six new soil conservation groups were organized as a result of the work done in the school. There was an average of twelve farmers to a group. The groups were organized with the aid of the County Extension Director and the Soil Conservation Service. The SCS wrote the farm plans and outlined most of the soil recommendations on those farms thereafter.

There are many things each individual instructor can do to aid in solving the problems of using time and selecting projects most efficiently. Of these, knowing his community well is of paramount importance. Planning work and keeping a record of needed or proposed follow-up work on planned instruction for different students aid greatly in arranging trips. Tours to well-planned farms where the students can see the desired results speed up individual instruction on nearly all projects. It is much easier to induce a farmer or vo-ag student to arrange his fields on the contour if he has seen or helped plan contoured fields. Likewise, tours to nearby farms where nearly all the approved practices of swine raising have been carried out make it easier to teach the student how he can improve his swine program. If you can interest the student in the classroom and while on the tour, he will be much more amenable to suggestion with respect to improvement of his own swine project. In fact, an individual instruction trip will often end up as a check trip to answer a few questions instead of a long, time-consuming trip to demonstrate the various jobs for him individually.

Obviously, a trip to a farm when the farmer is in the process of putting up hay with his neighbors is poor planning for all but a few instruction jobs. On the other hand, a trip to a farm while the farmer is plowing, cultivating, or mowing may provide opportunity for excellent instruction for follow-up work in mechanics, especially if his machine is out of line or adjustment and you can show him how to adjust it.

It is always easy to give follow-up instruction to farmers and vocational agriculture students who call you to come out and give them advice or who come to see you before starting a new job. Since your help there is appreciated more, it is natural to want to help them. But some of our greatest work can very well come from selling improved practices to the less progressive farmers and helping them to improve. They have farther to go and even a little progress can sometimes make a great deal of difference.

In summarizing, most of the problems of individual instruction can be solved by teaching practical jobs in your class work and by making sure that that instruction is at the level of the student. On-the-farm teaching in groups can cut the time needed for individual farm visits. Cooperating with other trained agricultural workers can help promote approved practices, thereby requiring less work and time on the part of the vocational agriculture instructor. Plan farm visits so they occur at a time when you can help the farmer and plan work that will be of value to him. Know your agriculture, your community, and the farmer. Don't visit farm friends half a day while trying to do farm supervision.

The surest way to get a job done is to get started with a sincere desire to be of service. Some vocational agriculture instructors can improve their work by visiting other departments. It is always possible to get new ideas each time you visit other instructors and look over their departments, and by reading professional material, books and magazines—particularly *The Agricultural Education Magazine*. □

A teacher's opinions regarding - - -

Farming Programs for Future Citizens

L. D. KOLAR, Vo-Ag Instructor, Fennimore, Wisconsin

Farming programs for students of vocational agriculture have long been recognized by authorities as a necessary and vital part of the agricultural program in high schools maintaining vocational agricultural departments.

When agriculture is taught as just another academic course, farming programs lose much of their value. It is only when agriculture is taught from a vocational viewpoint and only when it is closely allied with the experiences and activities of the farm, preferably the home farm on which the student lives with his family, that it can really be an honest to goodness training program that will have the true value so vital in determining the future welfare of the student involved.

It seems that the day of being concerned with whether the student of vocational agriculture enters the business of farming or some related field is past. The job at hand is to train the farm boy so that he can effectively take part in his chosen field. The problem of the instructor in agriculture is to develop farm boys into citizens who can effectively carry their share of responsibilities in our society, especially in the field of agriculture. It has been our experience that farming programs offer one of the best opportunities for that kind of development.

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Farming Programs - - -

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It is, of course, desirable and necessary that many farm boys enter into the business of farming. It is also important to so train farm boys that they may be valuable in other occupations. Where, then, can these boys better get the kind of experience which gives them the opportunity for such development than through good farming programs?

Many of our best learning processes come through experience activities. Undoubtedly that was the motive for creating our present program of vocational agriculture. To make a farming program really effective it seems to me that it must have at least three qualifications:

1. It must fit the student.
2. It must have the interest and support of the parents.
3. It must fit the farm.

It matters little what the farming program migh include as long as it meets the above requirements.

Often, where there is a real interest in farming on the part of the student and his parents, good farming programs develop outside a program of vocational agriculture. It seems, then, that the place of vocational agriculture is to support, to encourage, and to help develop to a point beyond what would otherwise be done upon that farm.

In 1951, our chapter took part in the state farm sheep flock program. Boys and their dads entered into financial management agreements whereby they would acquire full ownership. They took part in the Wisconsin Sheep Improvement Program. They followed a year round program of good management practices. They marketed their lambs according to grade through the local lamb pool. They sheared their own sheep. They marketed their wool through the Wisconsin Wool Growers Coop. Records were kept and a summary made at the end of the year. If one were to visit today one of the first flocks established, he would find a flock of 125 ewes. It has developed into one of the main enterprises on the farm.

The farm flock program should, however, not be used as the final measure of the student's farming program. The student should have taken part in the other activities on the farm. As he makes progress in agriculture in the classroom, his farming program should develop to the point where he can experience as many of the operations of the farm as possible.

It would seem, then, that if the farming program has really accomplished its purposes that:

1. It should have helped the student and his parents develop and improve the enterprises on the farm.
2. It should have built some security or equity, not only for the student, but for the farm family as well.
3. It should have given the student a real interest in finding out, taking home and putting into operation some valuable information that has resulted in valuable experiences.
4. Last of all it should result in developing the individual in a way that when his turn comes, whether he chooses the occupation of farming or occupation X, he is a valuable citizen in our society. □

To keep up with changes in farming - - -

Let's Teach Farming, Not Projects

A. E. WEINER, Vo-Ag Instructor, West Bend, Wisconsin

A. E. Weiner

THE days of the one calf, one sow, one acre of grain, one beef and similar projects are passing or should pass out of the agriculture teacher's thinking. We are no longer justified in thinking in terms of providing small, inefficient units of operation. Even with our freshmen boys, we better get them thinking in terms of the whole farm and not in terms of only one phase of farming. The pace at which farming operations are changing have caught us napping in our thinking about farming programs.

To mention a few of the things that have changed will set us thinking about the future.

1. Milking parlors and 60 to 100 cow herds.
2. Liquid and bulk fertilizers.
3. Bulk milk handling.
4. Bulk feed and liquid feed.
5. Farm management and marketing.
6. Insecticides.
7. Large broiler operations.

The above mentioned are only a few of the changes that have come about to make small projects inefficient.

Specialization rather than diversity has been brought about by regulations, especially in the dairy industry, thus making small projects a practice no longer suitable for students of vocational agriculture.

Change must come in the local agriculture teacher's program and must be recognized at the state and national level. We must recognize the need for a constant evaluation and change in our curriculum to meet the rapid changes that are taking place in our agricultural economy.

We have been led in our farming programs to follow the idea that ownership of projects and a good record book have been the goals upon which our departments have been evaluated. The number of boys whose projects win at the county, state and national fairs, and the winning judging teams, have been given too much consideration in evaluation. Only a few of the students in the agriculture program can enjoy this recognition.

All of us fail to realize that 75% of the boys in the department cannot select a calf, a sow or a baby beef from large numbers or large herds, and for a boy to buy one high priced animal and keep records on it is too time-consuming and inefficient.

The answer to the problem, as I see it, is a complete analysis of the farm to determine the soil capability and to center the livestock enterprises around what the soil will produce.

Plan the whole farming operation—planting, harvesting, breeding, feeding, marketing and management.

The climax to this program is a complete farm record system so that at the end of the year father, mother and son will know more about their business.

The son will have gained much broader experiences than he could have under the one calf or one sow type of farming program. He will have learned about the problems as they exist today and will be much better prepared to take over the farm because of his well-rounded experience and training program.

We are teaching in changing times and must keep ahead of the changes if we are going to develop the leadership that agriculture lacks today. □

Factors Associated with the Managerial Responsibilities Assumed by Vocational Agriculture Students with Their Swine Projects

PAUL HEMP, Teacher Education, University of Illinois

Paul Hemp

IN carrying out their supervised farming programs, students have opportunities to assume both manipulative and managerial responsibilities. In many instances these valuable learning experiences can be obtained only on the farm. Teachers can provide students with practice experience to a limited extent in the classroom, but they must depend primarily on the supervised farming program for the "laboratory" part of their teaching.

Observation and experience lead us to believe that vast inequalities exist in the amount and kind of on-farm responsibilities students assume with their swine projects. In a study designed to get at some of the factors associated with the amount of managerial responsibility assumed by students with their swine projects, the writer found that many boys had not assumed any responsibility in nine managerial areas of swine production. When 164 students who had completed one or more swine projects were asked to indicate the level of their participation in the management of their swine projects the following results were noted:

The reader may observe from these percentages that large variations exist in the amount of managerial responsibilities these students had assumed with their swine projects. This finding is rather commonly known by teachers and others who are close to students but the factors which are associated with these variations are often difficult to identify. The identification of the factors which cause differences to exist in the amount of responsibility students assume with their swine projects is perhaps the first step in improving the on-farm learning situations of students. In an attempt to identify some of these factors, the writer obtained managerial responsibility scores for the 164 students studied and compared mean scores of groups divided on the basis of the following factors:

1. Age of student
2. Grade level of student
3. Years of vocational agriculture completed
4. Years of swine project work completed
5. Number of older brothers at home
6. Vocational goal of student
7. Father living
8. Father's age
9. Degree of farm ownership
10. Occupational status of father
11. Size of farm
12. Number of swine on farm
13. Type of swine production project carried out by student
14. Number of animals in swine project
15. Degree of ownership student has in his swine project
16. Parental attitude
17. Number of visits teacher made to student's farm
18. Student's participation in swine study experience
19. Opportunity provided in the instructional exercise for student practice
20. Place where instruction was given
21. Degree to which teacher used eight selected teaching practices

The first sixteen factors have to do with students, their swine projects, or their home-farm situations. The last five factors have to do with teaching practice. Six of the first sixteen factors were found to be significantly related to the amount of managerial responsibility students assumed with their swine projects. These factors, the groups compared, and the mean managerial responsibility scores of each group are shown in Figure I.

The data in Figure I may be summarized as follows:

1. The amount of managerial responsibility these students had assumed with their swine proj-

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LEVEL OF PARTICIPATION

Management Job	I have not done this job.	I have done this job at least once with helpful suggestions or directions from someone else while doing the job.	I have done this job at least once without helpful suggestions or directions from someone else while doing the job.	I have done this job several times without helpful suggestions or directions from anyone else while doing the job.
	%	%	%	%
1. Deciding when to call a veterinarian.	36	32	16	16
2. Deciding when and how to castrate my swine.	22	43	17	18
3. Deciding which animals to buy or save for breeding.	18	48	17	17
4. Analyzing records at the close of the year to determine weak spots.	18	38	21	22
5. Deciding what type of buildings or equipment to use in my project.	14	50	16	20
6. Deciding when to breed my sow or gilt.	13	39	18	29
7. Planning a feeding ration for my swine.	13	43	16	28
8. Deciding when to market my swine.	13	44	18	25
9. Deciding how to handle sow and litter during farrowing.	9	46	15	30

Factors Associated - - -

(Continued from page 13)

ects was directly proportional to the number of years of swine project work completed.

2. Students from farms with more than 300 acres had assumed more managerial responsibility than had students from smaller farms. Students from farms of 11-100 acres were the next highest group in terms of their managerial responsibility scores.
3. Students from farms where more than 25 head of swine were raised annually had assumed more responsibility with their swine projects than students from farms where fewer than 25 animals were raised annually.
4. The amount of managerial responsibility assumed by students was directly related to the favorableness of parental attitude. Parental attitude toward letting sons assume responsibility was appraised by the 14 teachers concerned by using the scale given at the foot of Figure I.
5. Students who had 17 or more animals in their projects had assumed more managerial resibility with their swine projects than students who had less than 17 animals in their project.
6. Boys who owned part or all of their animals had assumed more managerial responsibility than students who did not own their project animals.

The five factors that had to do with teaching practice were not significantly related to the amount of responsibility assumed; however, for many of the jobs and factors not enough variation in responsibility scores existed for comparisons to be made. The data collected in connection with the five teaching factors indicate the following findings:

1. The managerial responsibility scores of students increased as the number of teacher visits per year increased from 0-9, however, the differences were not statistically significant.
2. Since most of the students had studied the nine managerial jobs, no fair comparisons could be made between the responsibility scores of those who studied the jobs and those who had not studied the jobs.
3. The fourteen teachers included in this study indicated that they had not provided practice as a part of the instruction on most of the nine jobs.
4. Only three of the nine management jobs had been taught to some extent on the farms of students. These jobs were deciding how to handle sow and litter during farrowing, deciding which animals to buy or save for breeding, and planning a feeding ration. No significant differences were found in the responsibility scores of any of the groups compared.

The findings with respect to the five factors pertaining to teaching practice indicate that the "learning by doing" principle has been applied much less in the teaching of management jobs than it has been in the teaching of manipulative jobs. The only management job which teachers taught by providing practice was the job of analyzing project records. In most instances, teachers tend to concentrate instruction in the nine swine management areas at one grade level as opposed to teaching some management during each of the four years of vocational agriculture. The making of plans for carrying out their swine projects is usually accomplished during the early part of the year rather than being tied in with instructional units taught during the year.

In view of the findings of this study the following suggestions for teaching practice are made:

1. Standards used to evaluate student progress in assuming managerial responsibility with swine projects should be set progressively higher as the number of swine projects completed increases.
2. Students from farms of more than 300 acres or from farms of 11-100 acres had assumed more managerial responsibility than students from farms of other sizes. Apparently one factor which helps govern the responsibility level of students is the opportunities they have at home. It may be that more opportunities for assuming responsibility exist on small farms and very large farms.
3. Students from farms where swine is not an important enterprise may need more swine instruction from the teacher than students who live on swine

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Fig. I Relationship of Six Factors to the Mean Managerial Responsibility Scores of Students

Factors	Group	N	Mean Managerial Score*
1. Years of Swine Project Work	1 year	79	12.1
	2 years	46	14.3
	3 years	19	15.5
2. Size of Farm	1–10 Acres	18	11.7
	11–100 "	59	14.3
	101–200 "	34	12.2
	201–300 "	19	11.3
	301 or more	14	16.4
3. Number of Swine on Farm	Under 25	51	11.4
	25–75	45	14.6
	76–125	25	13.4
	126 or more	23	14.6
4. Parental Attitude	A[1]	59	15.1
	B[2]	48	13.2
	C[3]	37	10.5
5. Size of Swine Project	8 or less	61	11.7
	9–16	45	13.0
	17–24	14	16.5
	25 or more	24	16.1
6. Degree of Project Ownership	Another person	17	8.0
	Joint owners	59	13.8
	Boy	68	14.1

A[1] Parents usually encourage boy to take on new responsibilities with his swine project. They spend time in assisting and encouraging him to assume full control (managerial and operative) of his swine project.

B[2] Parents do not prevent boy from assuming new responsibilities; neither do they encourage him to any great extent.

C[3] Parents usually make the managerial decisions and allow the boy to do only manipulative jobs for the most part.

* Students could score from 0-27 depending on the amount of managerial responsibility assumed with their swine projects.

Factors Associated - - -

(Continued from page 14)

farms. We might reasonably expect students from swine farms to secure valuable learning experience from their fathers' herds.

4. To enhance the on-farm learning situations of students, teachers should see to it that parents develop favorable attitudes towards letting their sons assume responsibility. Presumably, favorable parental atitudes would include, among other things, a thorough understanding of the purposes of supervised farming programs.
5. In order to provide students with challenging learning situations at home, teachers should encourage students to increase the scope of their swine projects as they proceed through school.
6. In this study, students who did not own their project animals assumed a low level of managerial responsibility. Whenever possible, students should own part or all of their swine projects.
7. The teaching of management jobs has often been carried out without application of the "learning by doing" principle. Further studies need to be made comparing the responsibility levels achieved by students taught with and without practice, at school and on the farm, and with and without the benefit of selected teaching practices. □

Do Earnings and Savings Projects Present a Problem in Your Chapter?

EDGAR N. HINKLE, Vo-Ag Instructor, Barneston, Nebraska

Edgar N. Hinkle

I BELIEVE one of the greatest problems facing many FFA chapters is that of financing their activities. A good chapter must have sufficient funds or many of its activities will fail. Whenever a chapter has no income the activity program suffers, thus resulting in decreased interest of the boys in carrying on their duties.

The first problem involved in an earnings and savings project is what to do to earn money, followed by a still greater problem of how the project will be handled. Who is to perform the work? Many times it seems the teacher does most of the work. If this is true in your chapter, it is time to stop and analyze your program. It is true we cannot force our boys to work if they aren't interested in the FFA. We must select money-raising projects that will challenge the boys to want to do the work. But we must not stop at that point. After selection of the project, set up some rules concerning the work. If the instructor does not do this, then it will be hard to have a sufficient number of boys for the work. A discouraged teacher who does most of the work will find that he must establish rules.

Here is how we operate in our chapter. These rules were set up by our executive committee prior to beginning our earnings and savings activities for this year. In order to be eligible to attend the state and national FFA conventions, to go on our annual vacation camping trip, or to be on judging teams, the boys must work three-fourths the number of hours or days spent on a money-raising activity.

Barneston FFA boys complete tearing down house.

We tried this last spring in a house razing project. In this case, there were 26 boys out of 40 that qualified to go on our vacation trip this summer. Roll call was taken twice daily, once in the morning and once in the afternoon. Names were checked and, at the close of the project, a complete list of boys who qualified was available. Perhaps you have other ways of getting a good turn-out for such projects; we have found our system to be quite adequate in most cases. □

Positive suggestions for improving - - -

Supervision in Agricultural Education

BONARD S. WILSON*

Bonard S. Wilson

HOW is theat work going? Do you feel you are getting accomplished, with your teachers, what you would like to? Are you doing a better job of supervision than you were a year ago? If you have the time and would be interested, maybe we could take a look at some things that may be of help to you.

First, what kind of a supervisor would you like to be? What are you trying to get done? You may say this in different ways, but perhaps basically, you are wanting to help your teachers do the best job of teaching they can—to be high producers, to be satisfied with teaching vocational agriculture, and to have high morale. Maybe we should go into more detail, but this is probably far enough for now.

The next question is: What is your present level of operation? How productive are your teachers? How high is their morale? Take a little time and be as honest with yourself as you can in answering this one. If your present level of operation is up to your ideal, then you will not be interested in my taking any more of your time. If it isn't, maybe we could figure out some ways of helping you bring them closer together.

Why is your present level as it is? Why do you supervise as you do?

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*Dr. Bonard S. Wilson, Training Advisor in Community Development International Cooperation Administration, Manila, P. I., formerly in Teacher Education at University of Tennessee.

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Why do you not attain the production and morale that you would like in your teachers? There is a theory in social psychology called the quasi-equilibrium theory of behavior change that we might use here to bring your problem more into focus. This theory says that for a given level there are forces tending to push the level up and there are counteracting forces that tend to push it down so an equilibrium is reached and maintained. As an illustration let's take your smoking. How many packs a day do you smoke? One? What reasons would you give for smoking a pack a day? Probably you'll say that you enjoy smoking, it relaxes you, it is a good way to break the ice with someone, it is a habit, etc. Now, why do you not smoke more than one pack? Is it the cost, health hazard, objections of wife, or just that one pack seems to satisfy your need? Now let's do this with your level of supervision.

The reasons for your present level of supervision being as high as it is will probably fall into these three categories:

a. *A desire to do a good job.* You want to do the best job of which you are capable. You have the position and the ability and you want to do the best you can. You want to be able to be proud of your accomplishments. You want to be able to live with yourself.

b. *Pressures from your supervisors.* This may come only through their helping you to do a better job by giving you good supervision. Usually, though, the matter of promotions, salary increases, recognition, being included in decision-making, being on important committees and other rewards for good work are involved in the pressures from above. Sometimes the threat of being fired or demoted is a factor for some people, although most people would agree that threats usually have a negative value rather than a positive one.

c. *Competition with other supervisors.* You may or may not like for competition to be a factor, but you probably have a desire to at least keep up with the other supervisors and maybe are even trying to do a better job than they. This can be within your state with other vo-ag supervisors, with other vocational or general supervisors, or it can be with supervisors in other states.

With all these forces tending to push your production up, there must be an equal pressure keeping it from going higher. Again, you will probably find that the reasons you give will fall in such categories as the following:

a. *Difficulties of the job.* This may be a matter of not having the skill it takes to do the job as you would like. It may be lack of help from your supervisor. Maybe it is conflicting or restrictive policies from above. Maybe you have too many teachers under your supervision. Maybe you have too many things expected of you—too many irons in the fire.

b. *Avoidance of strain.* You just do not have more time or energy to give to the job. Your wife and children would like to see you some time. It is easier to do things the way you do now.

c. *Group standards restricting your activities.* This one may surprise you, but once you give it thought you will about have to agree that there are pressures from other supervisors and from your teachers that tend to restrict your production. You do not want to be branded as an "eager-beaver." Other supervisors do not want you to do better than they. Your teachers want to avoid more work so they may be bringing pressure on you to take it easy, telling you to not try to remake things in one year. If you do not hold back some, you may become isolated from your colleagues and from your teachers.

Well, what is keeping *you* at your present level? Once we know this, we can begin to think of ways to:

a. Decrease the negative factors.
b. Increase the positive factors.
c. Do both, or change a negative to a positive.

The research on the matter shows that it is usually best to first try to reduce the negative forces rather than to increase the positive forces. The latter approach tends to increase tension, while the former one reduces tension in the individual. One may be typified as the "high-pressure sell" while the other is the "soft-sell." We do not like to be high pressured, hence the creation of tension in us. We do appreciate someone helping us to remove obstacles.

Improvement or any change is a three stage process. You first must "unfreeze" your present position, then you move to a new position and "refreeze." This may be done easily or it may be a difficult process needing much effort and time to accomplish. It depends upon the factors in your particular case and upon your desire and opportunity to make the changes necessary.

Since I do not know what changes you may need or want to make, about all that I can do is to suggest some things that may help you. I will draw heavily upon research done by the Survey Research Center of the University of Michigan and reported on by Robert L. Kahn and Daniel Katz.[1] These studies were conducted in a variety of industrial situations and in civilian and military agencies—the home office of an insurance company, an electric utility, an automotive manufacturer, a tractor company, two agencies of the federal government, an appliance manufacturer, and section gangs on a railroad. The things they found out may not have any bearing on your particular problem because you do not fit into any of these categories, but let's take a look first and see if their findings will be of help.

They found that the factors in supervision that are most important in affecting productivity and morale are what they termed:

a. Differentiation of Supervisory Role
b. Closeness of Supervision
c. Employee-Orientation
d. Group Relationships

Taking the first one, *differentiation of supervisory role*, they found that the supervisor with the higher productive records plays a more differentiated role than the supervisor with the poor productive records. He does not perform the same functions as the rank and file worker, but assumes more of the functions traditionally expected of leaders. He spends more time in planning the work and performing special skilled tasks. His planning is of higher quality. He gives a larger proportion of his time to supervisory functions, especially to the inter-personal aspects of their

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[1]Kahn, Robert L. and Daniel Katz—"Leadership Practices in Relation to Productivity and Morale," Chapter 41 of *Group Dynamics Research* and Theory by Cartwright and Zander, Row Peterson & Co., New York.

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jobs. His men were more satisfied with the company than the men whose supervisors gave their time primarily to other aspects of the job.

The low-producing supervisors, on the other hand, were more likely to spend their time in tasks which the men themselves were performing or in the paper-work aspects of their jobs. There is a tendency for an informal leader to arise to compensate for the lack of leadership from the supervisor. Their men are less satisfied with their job, with their supervisor and with their organization.

Not only was production higher, but morale was higher in the groups who perceived their supervisors as performing a number of broad supportive functions. Their supervisors enforced the rules and kept production up, but they also did such things as on-the-job training, recommending people for promotion and transfer, and communicating relevant information about the work and the company.

You may ask, "Why is this so?" It seems the differentiated role of the supervisor apparently affects the productivity of the group in two ways: (a) the attention given to planning has a direct effect upon output in the coordination and organization of the tasks of the group, and (b) he can increase or decrease the motivation of his employees to produce by the use of human relations skills.

Does this have any meaning for you? This is for you to decide. How do you spend your time? Do you spend enough time in planning? Do you spend a lot of your time doing things that teachers could easily do? I know one supervisor who lets the teachers do all the chore work in relation to contests so that he is free to do supervision. Are you tied to your desk with paper work to the extent that you find it hard to spend enough time with your teachers? This may be a cause of your being dissatisfied with the quality of your supervision or it may be a result. If paper work prevents you from getting out, you cannot do the job you would like to do. On the other hand, if you are unable to do the job you would like to do, maybe you are compensating by doing more of the paper work and details.

Another aspect, you recall, is the *closeness of supervision* given by the supervisor. They found this to be a major dimension which appears to discriminate between high and low-producing supervisors. The high-producing supervisors spent more time supervising but they did not supervise as closely as did the low-producing ones. They let their workers set their own pace, while the low-producing supervisors tend to check up on their men more frequently to give them more detailed and more frequent work instructions and in general to limit their freedom to do the work in their own way.

Close supervision has negative morale and motivation implications. Greater freedom produces positive results through satisfaction that the individual has in participation and in self-determination. Workers who had a lot to say about their own work wanted no less to say about it and they were relatively high on the three dimensions of morale—satisfaction with job, supervisor and company. Workers who had little to say about how their jobs should be done wanted more to say about it and were relatively high on the three dimensions of morale—satisfaction with job, supervisor and company. Close supervision apparently interferes with the gratification of some strongly-felt needs.

Do your teachers have an adequate share in planning their activities or are most things prescribed from the district or state office? Do you give them sufficient encouragement to "try new ways" of doing the job, of doing it their own way. Do they feel you are requiring too many reports and that you are asking for too much detailed planning from them? Maybe you could raise your level of supervision by supervising less closely.

Employee-orientation, a syndrome of characteristics, is the third dimension of supervision that has been demonstrated to be related to productivity. The employee-oriented supervisor, in contrast to the institution-oriented or production-oriented supervisor, gives major attention to creating employee motivation by taking a personal interest in them, by being more understanding and less punitive when mistakes are made, by grooming employees for promotion, by teaching them new things and by other means. However, we find that the low-producing supervisors emphasized production and the technical aspects of the job and tended to think of their employees as "people to get the work done." They often ask that things be done "for the good of the service or the company." In contrast, the high-producing supervisors emphasized training people, took an interest in employees and considered them primarily as individual human beings. Their men were more likely to report a good over-all relationship with their supervisor in terms of the quality of his supervision, the way they got along with him and the interest he took in them. In addition they reported good communications with him, that he let them know how they were doing, that he was easy to talk with, that it usually helped to talk over a problem with him, and that he took care of things right away.

What would a study of your supervision show? Are you employee-oriented or service-oriented or somewhere in between? Maybe some of the things you are doing, if these findings are applicable, are decreasing the production and morale of the teachers when you have felt they would be helpful in increasing it. I doubt that vo-ag teachers are enough different from other people that they would not respond best to a supervisor who treats them as a colleague. Maybe we should even question this time-honored advice that the supervisor should "keep his distance" and not be too friendly with his teachers or they will take advantage of him. The researchers did not find this to be true. More evidence is available on this in the next factor—Group Relationships.

Relationships in the work group seem to be emerging as a fourth, major determinant of productivity. It also affects morale. Productivity and morale have many determinants in common, but they are not always correlated. It was found, though, that men in the high-producing groups tended to express a more favorable evaluation of their work group and of their division. Their morale was higher also. The men tended to help each other and there was a team spirit or cohesiveness. There was no difference between the low and high producers in the charasteristics they ascribed to their groups in the areas of skill, know-how, education, and the like, so group relationships receives support as a factor in productivity. The low-producing groups tended not to help each other as did the high-producing groups, nor did they report as much team spirit or satisfaction with their group.

You may feel that the relationships of the group is not your job as a supervisor. However, if it is this important,

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you should be concerned and do all you can to improve the relationships among your men. There are ways of doing this and you can probably be more effective if you use them.

We have mostly been talking about things that you perhaps can do. Before you take me to task on this, it might be well to tell you what the researchers found out about your supervisors and the kind of supervision you were getting and how this affects you with your men. For instance, the style of supervision which is characteristic of first-level (just above the workers) supervisors reflects in considerable degree the organizational climate which exists at higher levels in the management hierarchy. Low-producing supervisors reported that they were under closer supervision from above, while the high-producing supervisors reported that they were able to plan their own work as much and as far ahead as they wanted to. The supervisor who is given so little freedom or authority by his superiors that he will be unable to exert a meaningful influence on the environment in which he and his men function will be ineffective in dealing with employees regardless of his human relations skills. His intended supportive action may have a negative effect on the attitudes of his men insofar as they encourage expectations which cannot be met by him. As an example, if you have nothing to say about their getting promotions, transfers, etc., you may cause more harm than good by encouraging them to try for better positions. The better job may be given to someone who has not improved himself.

The evidence also indicates that the quality of employee-orientation, like closeness of supervision, is in part determined by organizational characteristics and is not entirely the reflection of the personality and functions of the supervisor. If the company is so tightly organized and centrally controlled that the tasks of even the smallest work groups are prescribed, then the first-level supervisor with extremely high planning ability will not affect the productive process. The matter of group relations also affects the supervisor in the same way that his men are affected. Satisfying relationships with other supervisors and with one's own superiors is conducive to high production and morale of that supervisor.

I am sure that you feel this is part of your trouble. If you had a little more freedom, a little more employee-orientation coming your way, a little more constructive help, you could improve your production. Maybe you can tactfully suggest that your supervisor read this too; much of it would fit him also, don't you think? On the other hand, do not put all the burden on him; there are things you can do for yourself.

Many supervisors and others are getting the kind of help they need in becoming better supervisors, teachers and leaders by attending one of the summer laboratories in group development or human relations that are held in many parts of the country each year. There are at least 10 of them, maybe more by now. You can get a complete listing of them along with the dates of their sessions by writing to the National Training Laboratories of the National Education Association at 1201 16th St., N.W., Washington 6, D.C. Maybe one is near-by and you can make it this year or next.

Supervision in vocational agriculture is perhaps the key job in the whole program. An improvement of supervision will directly effect improvements in the program. You can help improve the program by taking stock of your own job of supervision and then improving yourself to the level to which you aspire. We have touched on only a few of the forces that may be keeping you where you are. You may need to work on other factors as well. □

Teacher finds demand for - - -

A Year-Around Adult Program

WILLIAM WELL, Vo-Ag Instructor, Median, N. Dakota

I am writing this article so that other Vo-Ag teachers might share the experience I have had with a year-around adult program. I would like to describe this plan with a phrase such as, "feeding a balanced ration of adult farmer instruction."

In order to give the farmers in this area a "balanced ration" and a "complete ration" of instruction, they are getting the following:

1. A continuous adult class which meets once each month of the year.
2. Specific courses which concentrate on one topic such as welding or farm electricity. These classes meet once a week during the winter months for a total of 30 hours of instruction.
3. At least one tour each year to farms that have put new ideas into operation successfully.

Some instructors may think that a young farmer class should be included too. At the present time, the young farmers are included in the specific courses and the monthly class.

The year-around class came about mainly because of requests from my adult class members, who had attended classes on livestock production and crop production, and from the advisory committee. When the last meeting of our scheduled livestock production class was held last February, the farmers asked, "Why not continue having class throughout the year?" They suggested reasons why this might be a good idea. Some of the reasons are listed below:

1. So that topics can be taught during the season when the information will be put into use.
2. So that we can get the latest information from the agricultural college and other research centers.

A course was set up with one main topic for each month depending upon the season. In addition to that topic, the latest information that had come into the agricultural instructor's office and which was important to agriculture in our area, was to be discussed. Since there were topics pertaining to both livestock and crops, the course was to be called "Farm Management."

This class has been going for almost a year now and the response has been very good. The enrollment dropped during harvest but by no means fizzled out. From September on, the enrollment was right back up again. The farmers want to continue the class during 1959. I am sold on the year-around adult class and think that it certainly has a place in a "balanced ration of adult farmer instruction." □

NEXT MONTH
Professional Organization

Studies in Progress in Agricultural Education During 1958-1959

NORTH ATLANTIC REGION

Compiled by C. W. Hill, Cornell University

ANNIS, WILLIAM H., "The Needs of Farmers in Agricultural Mechanics in Selected Counties of New York," Thesis, Ed.D., Agricultural Education Division, Cornell University.

BALL, JOHN, "Part-time Placement Opportunities for Vocational Agriculture Students," Non-Thesis Study, Curriculum Laboratory, School of Education, University of Connecticut.

BAIL, JOE P., "Follow-up Study of Former Students in Vocational Agriculture 1948-1957, in New York State," Staff Study, Agricultural Education Division, Cornell University.

CAREY, ALBERT R., "Relationships of School Guidance Programs to Vocational Agriculture in High Schools in Lycoming and Clinton Counties in Pennsylvania," Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

COX, SEIGLE WAYNE, "Planning Certain Phases of a Total Program of Vocational Agriculture for the Waynesburg (Pa.) High School and Community," Problem, M.S., Department of Agricultural Education, West Virginia University.

CURTIS, SAMUEL M., "An Evaluation of Student Leadership Performance in Eight Central Pennsylvania High Schools," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

EDGECOMB, PHILIP L., "A Comparison of Approved Practices with Selected Production Factors and an Appraisal of Yield Estimation Procedures in Potato Enterprise Projects," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

FLANAGAN, JOHN J., "Possibilities for Continuation Education of Young and Adult Folk in Rural Areas of Fayette, Raleigh, and Summers Counties of West Virginia," Problem, M.S., Agricultural Education Department, West Virginia University.

FRANCIS, CHARLES W., "A Follow-up Study of University of Maryland Graduates of the College of Agriculture," Thesis, M.S., Department of Agricultural Education, University of Maryland.

FURRY, THEODORE E., "Relation of Major Soil Types and Characteristics to Crops Grown on Farms in Perry County, Pennsylvania," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

GAYLORD, BRUCE A., "Characteristics Associated with the Establishment of a Dairy Farmer in Farming and in the Community in New York State," Thesis, Ed.D., Agricultural Education Division, Cornell University.

HAER, J. WESLEY, "Characteristics of the Different Milk Markets in the Shippensburg Area and of the Farmers Supplying Milk to Them," Thesis, M. Ed., Department of Agricultural Education, The Pennsylvania State University.

HARRIS, WILMER L., "Effectiveness of Integrated Farm Mechanics Instruction in High School Vocational Agriculture," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

HERR, ROBERT D., "Relationship Between Approved Practices Used and Selected Production and Financial Efficiency Factors in a Group of Vocational Agriculture Beef Fattening Projects in Pennsylvania," Thesis, M.S., Department of Agricultural Education, The Pennsylvania State University.

HOPKINS, H. PALMER, "Improving Agricultural Community Shows and Exhibits," Staff Study, Department of Agricultural Education, University of Maryland.

INTER, THOMAS W., "Determination of Young Adult Farmers' Individual Interests and Participation in Educational and Social Activities," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

JONES, ROBERT C., "Agricultural Training Needs of High School Pupils in Massachusetts," Thesis, Ed.D., Agricultural Education Division, Cornell University.

MARTIN, W. HOWARD, "Plans and Placement, Vocational Agriculture Seniors of 1958," Staff Study, School of Education, University of Connecticut.

MCGUIRE, ROBERT M., "A Study of the Reading and Mental Abilities of Vocational Agriculture Students in Cortland County, New York," Essay, M.Ed., Agricultural Education Division, Cornell University.

MCHENRY, SILAS L., "Functions and Activities of Extension Specialists and County Agents in Relation to Instructional Methods Used in Teaching Poultry Production," Thesis, Ed.D., Department of Agricultural Education, The Pennsylvania State University.

MCMILLION, MARTIN B., "Efficiency Standards and Measuring Procedures for Productive Enterprises in Vocational Agriculture in Pennsylvania," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

NOVERO, WALFRIDO P., "Farm Mechanics Skills Needed by Teachers of Vocational Agriculture in the Philippines," Thesis, M.S., Agricultural Education Division, Cornell University.

OLIVER, CRAIG S., "Development and Testing of a Calendar of Activities for Greenhouses in Vocational Agriculture Departments in Pennsylvania High Schools," Thesis, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

PATEL, AMBOOBHAI U., "A Study of the Supervised Farming Programs to Identify Principles and Characteristics With Application to the Teaching of Vocational Agriculture in India," Essay, M.S., Agricultural Education Division, Cornell University.

PEARSON, ALFRED O., "An Analysis of In-Service Tractor Maintenance Clinics for a Special Group of Teachers of Vocational Agriculture in Georgia," Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

RAMSEY, HERBERT P., "Requirements of a Paint Spray Booth in a Farm Mechanics Shop," Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

SAMPSON, JAMES A., "The Role of the Vocational Agriculture Teacher in a System of Agriculture Involving Integration," Problem, M.S., Department of Agricultural Education, West Virginia University.

SANTOS, JR., SEVERINO R., "Ways of Financing Supervised Farming Programs of Vocational Agriculture Students in the Philippines," Thesis, M.S., Agricultural Education Division, Cornell University.

SULLIVAN, HAROLD W., "The Adequacy of Agriculture Mechanics Offerings in Meeting the Needs and Wants of Vocational Agriculture Enrollees," Problem, M.S., Agricultural Education Department, West Virginia University.

SZARLETA, NORBERT E., "The Effect of Proportionate and Non-Proportionate Sampling of Milk Upon the Butterfat Test," Thesis, M.S., Department of Agricultural Education, The Pennsylvania State University.

THOMPSON, JOHN L., "An Analysis of Factors Affecting Farm Accidents in Frederick County," Thesis, M.S., Department of Agricultural Education, University of Maryland.

TOM, FREDERICK K.T., "A Survey of Employment Opportunities in Certain Occupations Related to Farming in New York," Staff Study, Agricultural Education Division, Cornell University.

TOM, FREDERICK K.T., "A Comparison of the College Achievement of Boys Who Studied Vocational Agriculture With Those Who Did Not," Staff Study, Agricultural Education Division, Cornell University.

WING, KENNETH E., "Proposals for the Improvement of the Program of the New York State FFA Camp," Essay, M.Ed., Agricultural Education Division, Cornell University.

NORTH CENTRAL REGION

Compiled by H. P. Sweany
Michigan State University

AGAN, R. J., "Opportunities of Administrators who Oversee Successful Departments of Vocational Agriculture in Kansas," Staff Study, Department of Vocational Education, Kansas State College.

AGAN, R. J., "Success of Agriculture Graduates in Farm-Related Businesses," Staff Study, Department of Vocational Education, Kansas State College.

AGAN, R. J., and D. A. KNIGHT, "Certain Factors Affecting Decisions Made by Farmers," Staff Study, Department of Vocational Education, Kansas State College.

BAKER, LEE O., "A Basis for Improving Technical Instruction for Preparing Teachers of General Agriculture in Michigan," Dissertation, Ed.D., Department of Teacher Education, Michigan State University.

BARRETT, DAVID C., "The Organizations of Program of Vocational Agriculture in Multiple Teacher Departments," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

BEAR, WILLIAM F., "Relation of High School Vocational Agriculture to Farm Mechanics Jobs Performed in Operation of the Farms of Graduates," Thesis Study, M.S., Department of Vocational Education, Iowa State College.

BOLLWAHN, LESTER P., "The Abilities of Young Farmers in Farm Mechanics with Implications for Instruction in Short Courses and Young Farmer Programs," Dissertation, Ed.D., Department of Teacher Education, Michigan State University.

BRUNING, ARTHUR L., "A Study of the Allocations of Time by Teachers of Vocational Agriculture for their Responsibilities," Thesis, M.S., Department of Education, South Dakota State College.

BYRAM, H. M., "Use and Effectiveness of Guidance Activities by Michigan Teachers of Vocational Agriculture," Staff Study, Department of Teacher Education, Michigan State University.

CALDWELL, MARION MILFORD, "An Evaluation of the Teacher Education Curriculum in Agricultural Education at South Carolina State," Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.

CHICOINE, ELDRED S., "Chapter Livestock Programs in Future Farmers of America Chapters in South Dakota," Thesis, M.S., Department of Education, South Dakota State College.

CHRISTENSEN, SIGMUND, "Visual Aids for Teaching Vocational Agriculture," Non-Thesis Study, Department of Vocational Education, Iowa State College.

CLOUSE, JAMES P., "Abilities Needed by Farmers in Certain Farm Mechanics Areas," Dissertation, Ph.D., Purdue University.

DAVIS, PHILIP B., "Factors Associated with Attendance at Adult Farmer Classes," Dissertation, Ph.D., Department of Teacher Education, Michigan State University.

DEBOER, WENDEL, "The Influence of High School Vocational Agriculture on Achievement in Selecting Beginning College Courses in Agriculture," Ph.D., Dissertation, Department of Agricultural Education, University of Minnesota, St. Paul.

DEYOE, GEORGE P., "Adjusting Local Programs of Vocational Agriculture to Changes in Agriculture," Staff Study, Division of Agricultural Education, University of Illinois.

DEYOE, GEORGE P., "Patterns of Subjects Taken in High School and Other Information about Students of Vocational Agriculture in Illinois," Staff Study, Division of Agricultural Education, University of Illinois.

FINLEY, P. B., "Survey Study of Kansas District Agriculture Contests," Master Study, Department of Vocational Education, Kansas State College.

FISCUS, K. E., "Source Unit on Animal Nutrition," Master Study, Department of Vocational Education, Kansas State College.

FLINT, RICHARD, "The Selection of State Farmer Candidates in Ohio," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

GALLOWAY, ROBERT EDWARD, "A Comparison of the Reading Difficulty of Vocational Agriculture Reference Books with the Reading Ability of Students Using Them," Dissertation, Ph.D., Purdue University.

GARRISON, L. C., JR., "Education for Agriculture in the Junior College," Master's Study, Department of Vocational Education, Kansas State College.

GRETEBECK, SANFORD, "Progress of Youth Toward Establishment in Farming," Dissertation Ph.D., Department of Agricultural and Extension Education, University of Wisconsin, Madison.

GUILER, GILBERT S., "An Evaluation of the Summer Program of Teachers of Vocational Agriculture in Ohio," Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.

HAMRICH, GEORGE, "The Development of a Swine Program in Agricultural Extension for Pickaway County," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

HARDWAY, WENDELL, "Principal's Evaluation of Local Program of Teachers of Vocational Agriculture in West Virginia," Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.

HARTZOG, DAVID H., "The Effect of Farmer Opinions on Course Content in Farm Mechanics," Dissertation, Ph. D., Department of Agricultural Education, University of Minnesota, St. Paul.

HEDGES, LOWELL E., "The Attitudes of Parents Towards Various Aspects of the Vocational Agriculture Program," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

HENRICH, CARL, "Source Unit of Cage Layers," Master's Study, Department of Vocational Education, Kansas State College.

HENSEL, JAMES W., "Relation Between High School Characteristics of Farm-Reared Senior Boys and Their Occupational Choices," Thesis, M.S., Department of Vocational Education, Iowa State College.

HORMIG, PAUL, "The Present Educational, Occupational, and Financial Positions of 1957 High School Graduates in Five Wisconsin Counties with Special Reference to the Value of a High School Education," Master's Study, Department of Agricultural and Extension Education, University of Wisconsin, Madison.

HORNER, JAMES T., "An Evaluation of the In-Service Program Provided by the North Carolina State College of Teachers of Vocational Agriculture," Dissertation, Ed.D., Department of Agricultural Education, University of Missouri.

KNECHT, VERNE H., "Factors Affecting Farming Programs of High School Vocational Agriculture Students," Thesis, M.S., Department of Vocational Education, Iowa State College.

KREBS, ALFRED H., "College Plans of Seniors in Vocational Agriculture in Illinois High Schools," Staff Study, Division of Agricultural Education, University of Illinois.

LARSON, JOHN R., "A Study of Arithmetic Deficiencies in Vocational Agriculture Students in the High School Classes," M.S. Colloquium Paper, Department of Agricultural Education, University of Minnesota, St. Paul.

LARSONS, MARVIN E., "A Study to Determine the Technical Abilities Needed in the Farm Mechanics Curriculum of Agricultural Education Majors in Pre-Service Training," Thesis, M.S., Department of Education, South Dakota State College.

MARTIN, SAM, "Careers of Graduates of the College of Agriculture and the Air Force Training Corps," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

MARVIN, R. PAUL, "A Study of the Effectiveness of Teaching Methods in Farm Machinery," Dissertation, Ph.D., Department of Agricultural Education, University of Minnesota, St. Paul.

MESSERSMITH, J. LEE, "Problems Encountered by Nebraska Teachers of Vocational Agriculture in Pursuing Advanced Study," Thesis, M.S., Department of Vocational Education, University of Nebraska.

MICHIGAN CONSULTANTS, "Educational Needs for Developing Agricultural Technicians," Staff Study, Department of Public Instruction, Agricultural Education Service.

MICHIGAN CONSULTANTS, "Load of the Teacher of Agriculture During Summer Months," Staff Study, Department of Public Instruction, Agricultural

Education Service.

MILLER, HOWARD, "Procedures for Disseminating Technical Agricultural Information to County Agricultural Extension Agents and Teachers of Vocational Agriculture," Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.

MISKELL, DAVID, "The Organization of Junior Fat Steer Sales in Ohio Counties," Non-Thesis, Department of Agricultural Education, The Ohio State University.

NIEMI, ALFRED O., "Instruction in Forestry in the Public Secondary Schools of Michigan," Dissertation, Ed.D., Department of Teacher Education, Michigan State University.

PFISTER, RICHARD G., "The Relationship of Selected Educational Practices and Environmental Factors to High and Low Accident Frequency Rates in Michigan High School Farm Shops," Dissertation, Ph.D., Department of Teacher Education, Michigan State University.

PHIPPS, LLOYD J., "A Case-Group Investigation of Procedures for Conducting Comprehensive Agricultural Education Programs for Beginning Farmers," Staff Study, Division of Agricultural Education, University of Illinois.

ROBINSON, TED R., "Guilford-Zimmerman Temperament Profiles of Iowa Vocational Agriculture Instructors," Thesis, M.S., Department of Vocational Education, Iowa State College.

SAATHOFF, W. K., "Some Trends in the Kansas Program of Vocational Agriculture," Master's Study, Department of Vocational Education, Kansas State College.

SAHLSTROM, STANLEY, "The Influence of Occupational Choice of High School Students on Future College Attendance," Dissertation, Ph.D., Department of Agricultural Education, University of Minnesota, St. Paul.

SATORIUS, JACK H., "Needs and Interests of Out-Of-School Young Farmers in Garnavillo and Colesburg, Iowa, Communities," Thesis, M.S., Department of Vocational Education, Iowa State College.

SCHROEDER, GENE, "Consistency of Occupational Choice of Students Between the Ninth and Tenth Grade Levels in Five Counties of Wisconsin," Master's Study, Department of Agricultural and Extension Education, University of Wisconsin, Madison.

SHIH, SAMUEL H. K., "A Basis for Course Content in Rural Electrification for the Preparation of Teachers of Vocational Agriculture in Michigan," Dissertation, Ed.D., Department of Teacher Education, Michigan State University.

SWEANY, H. P., "The Amount and Quality of Science Teaching and Learning in Vocational Agriculture," Staff Study, Department of Teacher Education, Michigan State University.

SWINGLE, THEODORE P., "The Vocational Choices of Male High School Students in Wayne County," Non-Thesis, Department of Agricultural Education, Ohio State University.

TUPPER, DONALD T., "A Study of the Factors Associated with Establishment in Farming," Thesis, M.S., Department of Education, South Dakota State College.

WARD, ARTHUR B., "Nebraska School Administrator and Vocational Agriculture Teacher Opinion Regarding Selected Problems in Adult and Young Farmer Education," Staff Study, Department of Vocational Education, University of Nebraska.

WARD, ARTHUR B., "Vocational Agriculture Graduate Enrollment and Performance in College," Staff Study, Department of Vocational Education, University of Nebraska.

WATKINS, JOHN W., "Facilities Needed for Teaching Farm Mechanics in Vocational Agriculture," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

WEBB, EARL S., "Opinions of School Administrators Concerning Selected Aspects of the Program of Vocational Agriculture in Missouri," Dissertation, Ed.D., Department of Agricultural Education, University of Missouri.

WESTON, CURTIS R., "A Study of Mechanical Jobs Performed by Selected Farmers in Missouri," Dissertation, Ed.D., Department of Agricultural Education, University of Missouri.

WILSON, ROBERT, "The Development of an Agronomy Program in Agricultural Extension for Butler County," Thesis, M.S., Department of Agricultural Education, The Ohio State University.

WOODIN, RALPH J., "Helping Vocational Agriculture Students Decide Upon College Entrance," Non-Thesis, Department of Agricultural Education, The Ohio State University.

WYATT, WINDOL L., "Occupational Status of Former Chapter and State Farmers in the Iowa Association, Future Farmers of America," Thesis, M.S., Department of Vocational Education, Iowa State College.

YOUNG, CLAIR, "Associate Membership in the Ohio 4-H Club Program," Non-Thesis, Department of Agricultural Education, The Ohio State University.

PACIFIC REGION

Compiled by Leo L. Knuti
Montana State College

ALLEYN, PATRICK F., "Evaluation of the Program of the College of Agriculture by the 1958 Graduates," M.S. in Agricultural Education, Department of Education, State College of Washington, Pullman.

BAIRD, JAMES, "Comparison of Grade Point Averages of Agricultural Division College Students with and without Vocational Agriculture Backgrounds," Based on High School Rank, Master's Problem, Montana State College, Bozeman.

BROWN, BERT L., "Training Required by Workers in Businesses Associated with Agriculture," Non-Thesis Study, State Board for Vocational Education, Olympia, Washington.

BUTTERFIELD, PAUL G., "What is the Need for Young Farmer Programs in the Cache L a Poudre District?", Master's Report, Colorado State University.

CARNIE, GEORGE MAJOR, "Evaluation of the Pre-Service Training of Vocational Agriculture Instructors in Farm Mechanics," Master's Thesis, Department of Agricultural Education, University of Idaho, Moscow, Idaho.

CRAGUN, JOHN, "The Relationships of Science and Vocational Agriculture," Master's Report, Colorado State University.

DEALY, ROBERT F., "Factors Inhibiting Adult Farmers in Establishing Approved Farming Practices," Master's Report, Colorado State University.

ETZEL, NAT, "Using an Advisory Council in Establishing an Adult Education Program," Master of Agriculture Paper, Dept. of Agricultural Education, Oregon State College, Corvallis, Oregon.

FOSTER, PAUL J., "The Need for Additional Vocational Agricultural Education Departments in Colorado," Master's Report, Colorado State University.

HALL, DONALD E., "In-Service Training Needs of Teachers of Vocational Agriculture in Kansas," Master's Report, Colorado State University.

HESS, OLEEN, "Supervised Farming Poultry Programs in Philippine Schools of Vocational Agriculture," Master of Agriculture, Dept. of Agricultural Education, Oregon State College, Corvallis.

KILLIAN, GENE PAUL, "Analysis of Factors in the Development of Adult Classes in Vocational Agriculture in the State of Washington," M.S. in Agricultural Education, Dept. of Education, State College of Washington, Pullman.

LADDERUD, NILS A., "An Analysis of the Curriculum Implementation in the College of Agriculture as a Result of the 1950 Survey of Agricultural Graduates," M.S. in Agricultural Education, Dept. of Education, State College of Washington, Pullman.

LEACH, ALVIN, "Developing a Course of Study with an Advisory Council," Master of Agricultural Education, Dept. of Agricultural Education, Oregon State College, Corvallis, Oregon.

KINDSCHY, DWIGHT, "Relationships Between Agricultural College Training and Occupational Requirements," Ed. D. Dissertation, Dept. of Education, State College of Washington, Pullman.

MCCORMICK, FLOYD G., "Status of Former High School Graduates in Vocational Agriculture from North Central FFA District of Colorado," Master's Report, Colorado State University.

OWEN, KENNETH, "Historical Study of Vocational Agriculture Student Farming Programs," Master's Problem, Montana State College, Bozeman.

PULLMAN, LEROY, "Design and Construction of Large Animal Experimental Feeding Facilities," Master of Agriculture, Dept. of Agricultural Educa-

tion, Oregon State College, Corvallis, Oregon.

REIF, RAY, "Teaching through Future Farmers of American Machinery Co-operatives," Master of Agricultural Education, Oregon State College, Corvallis.

SCHMIDT, RICHARD, "A Comparison of High School and College Grade Point Average," Master in Agricultural Education, Oregon State College, Corvallis, Oregon.

TEN PAS, HENRY; AGAN, R. J.; AND DAVIS, PHILLIP B., "Expanding Technology of Vocational Education in America," Staff Study Department of Agricultural Education, Oregon State College, Corvallis, Oregon.

WARREN, VINCIL P., "The Place of Contests in Vocational Agricultural Programs," Master's Report, Colorado State University.

WILLIAMS, J. R. AND STATE STAFF, "A Survey to Determine the Opinions of Selected Arizona Ranchers, Farmers and Farm Machinery Dealers on the Farm Mechanics Abilities that Should be Included in the Vocational Agriculture Program of Instruction," State Agricultural Education Staff Study, University of Arizona.

WILSON, JOHN M., "An Occupational Survey of Former Vocational Agriculture Students of High Schools in the Wheat Area of Washington State," M.S. in Agricultural Education, Dept. of Education, State College of Washington, Pullman.

SOUTHERN REGION

Compiled by Don M. Orr
Oklahoma State University

BERTINO, JOE, "Status of School Farms Operated by High School Departments of Vocational Agriculture in Texas, 1957-58," A & M College of Texas.

BOTTOMS, D. N., "Facilities Being Used in Teaching Vocational Agriculture in Alabama," Non-Thesis, Staff study, Department of Agricultural Education, Alabama Polytechnic Institute.

CARRUTHERS, WILLIAM, "Selection and Guidance of Vocational Agriculture Students Through Use of Their Kuder Preference Record," A & M College of Texas.

COOK, CLAXTON, "The Association of Certain Personal Characteristics of Vocational Teachers with the Effectiveness of the Educational Program in Their Respective Departments," Thesis, Ed.D., Oklahoma State University.

EUBANKS, CARROLL W., "Factors Contributing to Educational Pursuits Beyond the High School Level," Dissertation, Department of Vocational Agricultural Education, Louisiana State University.

GALLIANO, VERNON F., "An Occupational Study of the College of Agriculture Graduates of Southwestern Louisiana Institute, 1938-58," Dissertation, Department of Vocational Agricultural Education, Louisiana State University.

GANDY, T. W., "Guidance Activities and Problems of Teachers of Vocational Agriculture in Alabama," Non-Thesis, Department of Agricultural Education, The Alabama Polytechnic Institute.

HEISKELL, LAWRENCE CARSON, "Occupations Entered by Agricultural Education Graduates of Virginia Polytechnic Institute 1948-1958," Thesis, M.S., Department of Agricultural Education, Virginia Polytechnic Institute.

HENDRICKS, JOHN BOB, "Evaluation of FFA Judging Contests in Area IV of Texas," A & M College of Texas.

HICKMAN, ROY DON, "Attitude Survey of A & M College Faculty Concerning Foreign Students Training Program at Texas A & M College," A & M College of Texas.

HOBBS, WALTER WESLEY, "Factors Associated with the Occurrence of Effective Local Farm Mechanics Programs in Vocational Agriculture in Oklahoma," Thesis, Ed.D., Oklahoma State University.

HUBBARD, ROBERT C., Jr., "A Study of the Control Program of the Sand Wireworm, and Its Effect on the Agricultural Economy of Bamberg County, South Carolina," Thesis, M.S., Clemson College.

JOHNSON, FLOYD D., "A Study of Sources of Credit Used in Financing the Supervised Farming Programs of Students of Vocational Agriculture in South Carolina in 1956-1957," Thesis, M.S., Clemson College.

LANE, KENNETH WILLIAM, "A Study of the Use of Teaching Aids in Classroom Instruction by the Agricultural Faculty at Virginia Polytechnic Institute," Thesis, M.S., Department of Agricultural Education, Virginia Polytechnic Institute.

LATTA, DWIGHT D., "A Program of Education in Farm Mechanics for Students of Vocational Agriculture in Fargo High School, Fargo, Oklahoma," Report, M.S., Oklahoma State University.

MITCHELL, JOHN, "Development of Vocational Agricultural Education in Louisiana," Dissertation, Department of Vocational Agricultural Education, Louisiana State University.

PADGETT, SENIS M., "A Study of the Instructional Program in Tractor Maintenance in Supervisory District IV, South Carolina," 1957-1958, Thesis, M.S., Clemson College.

SAUL, JOHN, "Comparison of Graduates from Small and Larger High Schools on Their Academic Performance as Freshmen Students at Texas A & M College in 1958-59," A & M College of Texas.

SOEWONDO, KARTOK, "A Proposal for the Improvement and Further Development of Vocational Agricultural Education in Indonesia," A & M College of Texas.

TERRY, JARED Y., "The Importance of Public Opinion in a Functional Educational System," Dissertation, Department of Vocational Agricultural Education, Louisiana State University.

THOMPSON, CHARLIE W., "A Study of the Practices Used by Farmers of the Lower Savannah River District in Growing Small Grain in the Area," Thesis, M.S., Clemson College.

WHITE, SAMUEL SHERMAN, "The Amount of Time Spent by Teachers of Vocational Agriculture in Teaching Science to Students," A & M College of Texas.

News and *Views* of the Profession

Snell Chairman of Editing-Managing Board

John A. Snell

John A. Snell, Director of Agricultural Education, Maine, succeeds E. W. Garris as Chairman of the Editing-Managing Board of *The Agricultural Education Magazine* beginning this month.

Snell was graduated from the University of Maine in 1927 with a B.S. degree in Agriculture. His first experience as a vocational agriculture teacher occurred at Monmouth, Maine. He then moved to Hampden, Maine, where he remained until 1947, serving for the last ten years of his tenure as both vocational agriculture teacher and principal. He taught vocational agriculture for a total of twenty years.

Director Snell earned the Master of Education degree in the School of Education, University of Maine, in 1945. He became Assistant State Supervisor for Agricultural Education in 1947 and accepted his present appointment in 1948. He has served on the Board of Trustees for the National FFA Foundation and is presently North Atlantic Region AVA Chairman.

John Snell married Frances Sinnett, Brewer, Maine, in 1930 and has one son, John A. Snell, Jr., presently attending high school. □

The Cover Picture

Paul Walker, teacher of vocational agriculture, Newton, Illinois, and Mr. and Mrs. Melvin Graves in the office of their farm home discuss records from litter weighings. Performance records in swine are an important part of the instructional program in swine improvement conducted with adult farmers by the Newton High School. (Photo by G. P. Deyoe, U. of Illinois.) □

DECISION MAKING AND MANAGEMENT FOR FARM AND HOME by Carl C. Malone and Lucile Holaday Malone, pp. 255, illustrated, The Iowa State College Press, Ames, Iowa. Price $3.95.

This publication stresses the importance of the farm family acting together to set goals and reach sound decisions.

The authors suggest that a six-part sequence fits the usual need for improving farm, family, and home management. The book has been built around this developmental pattern: (1) the family considers its goals, needs, and wants; (2) the family appraises its resources and opportunities; (3) the family searches out and studies alternatives that are promising; (4) the family develops the necessary plans for putting the best alternatives into use, including: better farming, improved homemaking, family development; (5) plans are put to use as rapidly as is advisable; and (6) as times or resources change, plans are further adjusted and improved.

A chapter is devoted to the young farm family with developments in contract farming, advice on buying machinery, planning for rising and falling prices, obtaining credit, and spending for home and family.

It is recommended that teachers of agriculture include this book in their departmental library. This publication should prove valuable as a reference or text in organized classes studying farm and home management.

The authors: Carl Malone is Professor of Economics and Sociology at Iowa State College, and Farm Management Specialist. Lucile Holaday Malone has been Home Management Specialist with the states of Iowa and Minnesota.

G. H. Porter,
Teacher Education
(Graduate Assistant),
North Carolina

LITERATURE OF AGRICULTURAL RESEARCH by J. Richard Blanchard and Harald Ostvold. Published by the University of California Press, Berkeley, California. 231 pp. 1958. Price $5.00.

This book is a systematic, comprehensive, bibliographic guide to the literature of agricultural research. The listings are arranged in six sections: General Agriculture, Plant Sciences, Animal Sciences, Physical Sciences, Food and Nutrition, and Social Sciences.

This is the first of a series of bibliographic guides sponsored by the University of California Libraries and issued by the University of California Press. The work was started in the U. S. Department of Agriculture Library in 1948 and represents more than eight years of effort by the two authors. Practically every type of bibliographical and informational service was used in locating and categorizing the references cited. Only the major reference tools are included and the emphasis is placed on American publications, although some foreign works are listed.

D. M. Nielsen,
Teacher Trainer,
Iowa

EXPLORING AGRICULTURE by Everett F. Evans and Roy L. Donahue. Published by Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 366 pp., illustrated. 1957.

Exploring Agriculture is a well illustrated and well organized summary of the most recent information on our rapidly changing agriculture. The book deals with the problems of agriculture and the ways in which science is helping to solve these problems. It is intended primarily for the study of general agriculture.

Approximately 300 photographs and illustrations are contained in the 29 chapters of the book. They assist in presenting a clear picture of modern agriculture. Current problems, principles and practices are discussed in relation to each other and to the whole field of modern agriculture. Examples are given for the major geographic regions of the United States.

D. M. Nielsen,
Teacher Trainer,
Iowa

DRY FARMING IN THE NORTHERN GREAT PLAINS by Mary Wilma M. Hargreaves. Published by Harvard University Press, Cambridge. 587 pp., illustrated. 1957. Price $10.00.

This book is well-documented analytical narrative of the promotion, accomplishments, development and problems of the agricultural settlement of the semi-arid lands of eastern Montana and the western Dakotas, 1900-1925.

The 587 pages are divided into three parts consisting of 18 chapters. There are 12 figures and six tables. In Part I, Mrs. Hargreaves describes nineteenth-century conceptions of the region—as the Great American Desert, designed to remain forever as the Grazing Domain of the nation. She paints vividly the difficulties of settlers in the area. In Part II she considers three aspects of the Dry-Farming movement: first, as the broad-effort at development, inspired by public and private interests with local and national propaganda; second, as a program of agricultural research through which scientists attempted to meet the demands of the promotional groups for leadership and the needs of inexperienced settlers for better farming techniques; and third, as a factor in national, state, and private land-use policies and programs. In Part III the author discusses the process of settlement itself. This book is a thorough history of the farm economy of the semi-arid Northern Great Plains during the first quarter of the 20th Century.

Mrs. Hargreaves is on the Research Staff of the University of Kentucky as Associate Editor of the Henry Clay Papers, and is now working on a comparable study of the 1925-1950 period. This book, her first, is Volume 101 in the Harvard Economic Studies.

D. M. Nielsen,
Teacher Trainer,
Iowa

INTRODUCTION TO AGRICULTURAL ECONOMIC ANALYSIS by C. E. Bishop and W. D. Toussaint, pp. 258, John Wiley & Sons, 1958. Price $5.95.

This book deals with the tools that are needed in making economic decisions for a high level of farm management. Much of it is mathematical, yet it is amply illustrated with examples for clarification.

It is divided into four parts. The introductory chapters deal with agriculture in the economy and decision making, in a general way. The second and largest part is concerned with input-output relationships, including some application to production of crops and livestock, as well as other related topics. Part III treats consumption and demand and Part IV certain aspects of economic progress involved in a changing world.

This book is intended primarily as a text for college sophomores and juniors with the objective of providing "a theoretical foundation for use in analysis of agricultural economic problems." In the opinion of this reviewer, its objective has been accomplished.

The book is above the level of understanding of most high school students, but most teachers of vocational agriculture will find it a worthwhile addition to their profession libraries. Teachers who have not studied formal economics for several years will find this book most helpful for reviewing and bringing up to date their understanding of basic principles and tools for making farm management decisions. This is especially true for teachers who are teaching farm management to young and adult farmer classes.

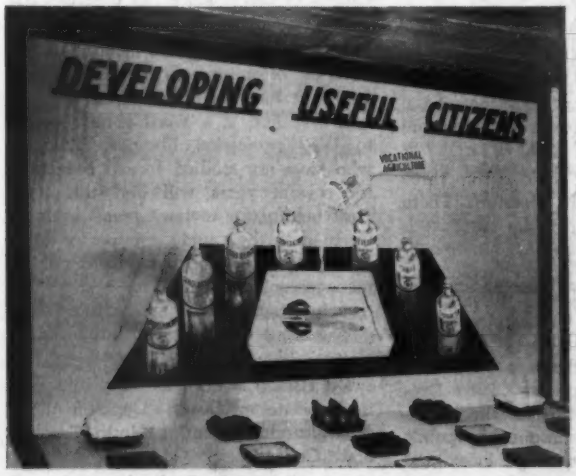
Dr. Bishop is head and Dr. Toussaint is associate professor, Department of Agricultural Economics, North Carolina State College.

V. R. Cardozier,
Teacher Trainer,
Tennessee

The signing of the Proclamation of NATIONAL FFA WEEK in Maui County, Hawaii, by the Chairman and Executive Officer, "Mayor" Eddie Tam. L. to R.—Advisor Roy Yonahara, Baldwin High School; President Harry Inouye, Lahainaluna Chapter; President Richard Hoopii, Baldwin Chapter; President Philbert Freitas, Maui High Chapter; Advisor Jim On, Maui High Chapter. (Maui News Photo)

Stories In Pictures

A group of instructors at the Wisconsin Summer Conference at the College of Agriculture, University of Wisconsin. Front row, left, Walter Hansen, Spring Valley, vice president WAVAI; 2nd row, right, Kenneth Wall, Ellsworth, president WAVAI.



Members of the Bunkie and Hessmer chapters of the Future Farmers of America in Louisiana prepared this outstanding exhibit on developing useful citizens.

OFFICERS of the Kansas State College Collegiate Future Farmers of America chapter, activated Tuesday night, February 24, are from left, George Huitt, Cainsville, Mo., parliamentarian; Bill Fultz, Altamont, reporter; Larry Johnson, Fredonia, vice-president; Joe Seibert, 6619 West 73, Overland Park, president; Larry Justice, 14321 West 67, Shawnee, secretary; Gary Harmon, Ellsworth, treasurer; and Carl Whitcomb, Neodesha, sentinel. Standing are Ray Agan, at left, assistant adviser, and P. N. Stevenson, adviser.

"Now hear this!", Vocational Director Earl Little tells the group of teachers who represent 146 years of service in agricultural education in New Hampshire. The occasion was the retirement of "Bud" Lester (center) after 36 years of teaching. L. to R.—P. Barton, teacher-trainer; A. Conner, vo-ag teacher; O. "Bud" Lester; L. Guptill, vo-ag teacher; and Earl Little.

A classroom tripod for flannel boards and charts which has unusual advantages was designed by Paul Schlotterbeck of Hamler, Ohio. Mr. Schlotterbeck's tripod does not require the use of supporting chains and other means of holding the legs in position. The tripod became a welding project for one of his farm mechanics classes.